IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A transition between a waveguide and a microstrip line, consisting of a single bar of synthetic material comprising a first part with metallized lateral faces to form a waveguide and a second part ~~continuing~~ extending from the first part ,said second part ~~and~~ forming a substrate for a microstrip line, said bar presenting, at a level of transition between the first part and the second part ~~between the waveguide forming part and the substrate forming part~~, a shoulder defining an upper plane of the waveguide forming part and an upper plane of the ~~substrate~~ second part forming ~~part~~ the substrate for the microstrip line, and comprising between the two upper planes a rib having a metallized base and walls, the metallization of the base continuing by the microstrip line realized on the second part forming a substrate, the base common to the first and second parts being fully metallized.

2. (Original)The transition according to claim 1, wherein the base of the rib has a linear profile.

3. (Currently amended) The transition according to claim 1, wherein the second ~~substrate~~ part forming ~~part~~ the substrate for a microstrip line has a thickness that varies in ~~a~~ the direction ~~continuing~~ extending from the first part ~~to modify~~ and the width of the microstrip line ~~by maintaining its~~ is modified so that the characteristic impedance ~~quasi-constant~~ is maintained constant.

4. (Original) The transition according to one of claim 1, wherein the synthetic material is a dielectric foam.

5. (Original) The transition according to claim 4, wherein the foam is a polymethacrylate imide foam.

6. (New) A method of producing a transition between a waveguide and a microstrip line comprising the step of:

-working a foam bar to obtain a rectangular form in a transversal cross section with dimensions corresponding to the inner dimensions of a rectangular waveguide;

-delimiting a rib in a section of the waveguide, said rib extending in a section receiving the microstrip;

-fully metallizing the foam bar; and

-cutting transversally the foam bar at the extremity of the rib to obtain the substrate of the microstrip line.